

VCO Final Lab

Robert Potter

CTI1301 – VCO – C202512 Section 01

Professor Tony Guzman

Part 1

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QEMU (rjpotter-Rocky) - noVNC - Google Chrome
itlab.fsemergingtech.com/?console=kvm&novnc=1&vmid=140&vmname=rjpotter-Rocky&node=node101&resize=off

[root@Robert-Rocky ~]# systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: disabled)
   Active: active (running) since Tue 2025-12-16 23:14:57 EST; 1min 3s ago
   TriggeredBy: ● docker.socket
     Docs: https://docs.docker.com
    Main PID: 1016 (dockerd)
      Tasks: 10
     Memory: 105.9M (peak: 107.4M)
        CPU: 260ms
    CGroup: /system.slice/docker.service
            └─1016 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Dec 16 23:14:55 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:55.738412202-05:00" level=info msg="Deleting nftables IPv6 rules" error="exit status 1"
Dec 16 23:14:55 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:55.767967235-05:00" level=info msg="Firewall: created docker-forwarding policy"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.007849450-05:00" level=info msg="Loading containers: done."
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.030091017-05:00" level=info msg="Docker daemon" commit=fbf3ed2 containerd-snapshotter=true
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.030316075-05:00" level=info msg="Initializing buildkit"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.055115811-05:00" level=warning msg="git source cannot be enabled: failed to find git binary"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.067176880-05:00" level=info msg="Completed buildkit initialization"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.074466592-05:00" level=info msg="Daemon has completed initialization"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.074559867-05:00" level=info msg="API listen on /run/docker.sock"
Dec 16 23:14:57 Robert-Rocky systemd[1]: Started Docker Application Container Engine.

[root@Robert-Rocky ~]# docker -v
Docker version 29.1.3, build f52814d
[root@Robert-Rocky ~]# date
Tue Dec 16 11:16:14 PM EST 2025
[root@Robert-Rocky ~]# _
```

Part 2

QEMU (rjpotter-Rocky) - noVNC - Google Chrome

itlab.fsemergingtech.com/?console=kvm&novnc=1&vmid=140&vmname=rjpotter-Rocky&node=node101&resize=off

```
[root@Robert-Rocky wordpress]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M   0  4.0M   0% /dev
tmpfs           1.8G   0  1.8G   0% /dev/shm
tmpfs           731M  8.8M  723M   2% /run
/dev/mapper/r1-root 6.2G  4.5G  1.8G  72% /
/dev/sda1       1814M  429M  586M  43% /boot
/dev/sdb1       2.0G   47M   1.9G   3% /robert-data
tmpfs          366M   0  366M   0% /run/user/0
overlay         6.2G  4.5G  1.8G  72% /var/lib/docker/rootfs/overlayfs/f81a4495394e356dba141851dd9920a862f1aa88ba89f18182179fcd743dab98
overlay         6.2G  4.5G  1.8G  72% /var/lib/docker/rootfs/overlayfs/058c98ec88ca4ca2b6b133ee44a2574c97626a67022553773f6fd5f8fe8ce2ab

[root@Robert-Rocky wordpress]# ls
docker-compose.yml

[root@Robert-Rocky wordpress]# date
Tue Dec 16 11:20:01 PM EST 2025

[root@Robert-Rocky wordpress]#
```

11:20 PM
12/16/2025

Part 3

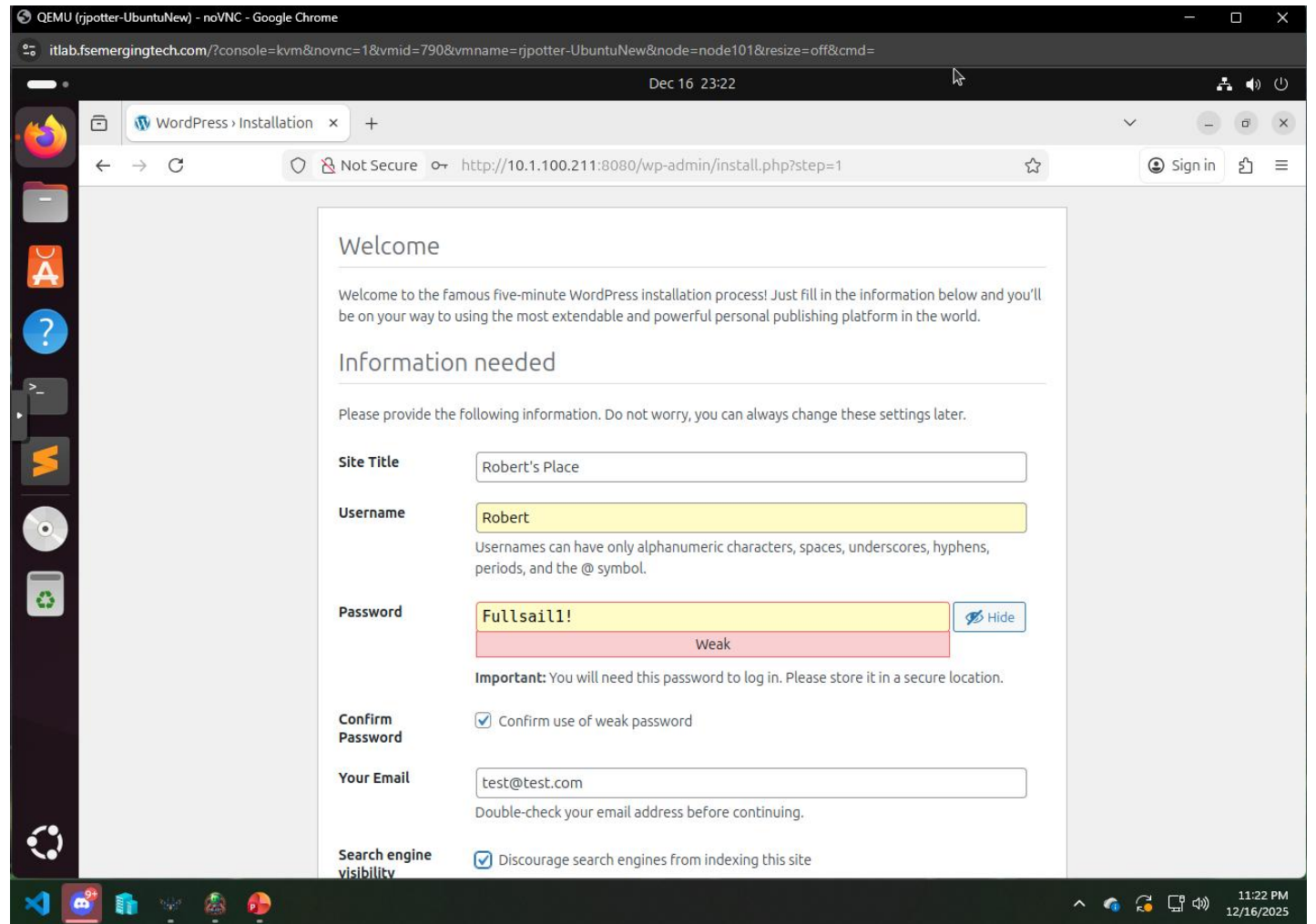
```
QEMU (rjpotter-Rocky) - noVNC - Google Chrome
itlab.fsemergingtech.com/?console=kvm&novnc=1&vmid=140&vmname=rjpotter-Rocky&node=node101&resize=off

[root@Robert-Rocky wordpress]# docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS                               NAMES
f81a4495394e   wordpress "docker-entrypoint.s..." 52 seconds ago Up 51 seconds 0.0.0.0:8080->80/tcp               wordpress-wordpress-1
058c98ec88ca   mysql:8.0  "docker-entrypoint.s..." 52 seconds ago Up 51 seconds 3306/tcp, 33060/tcp               wordpress-db-1

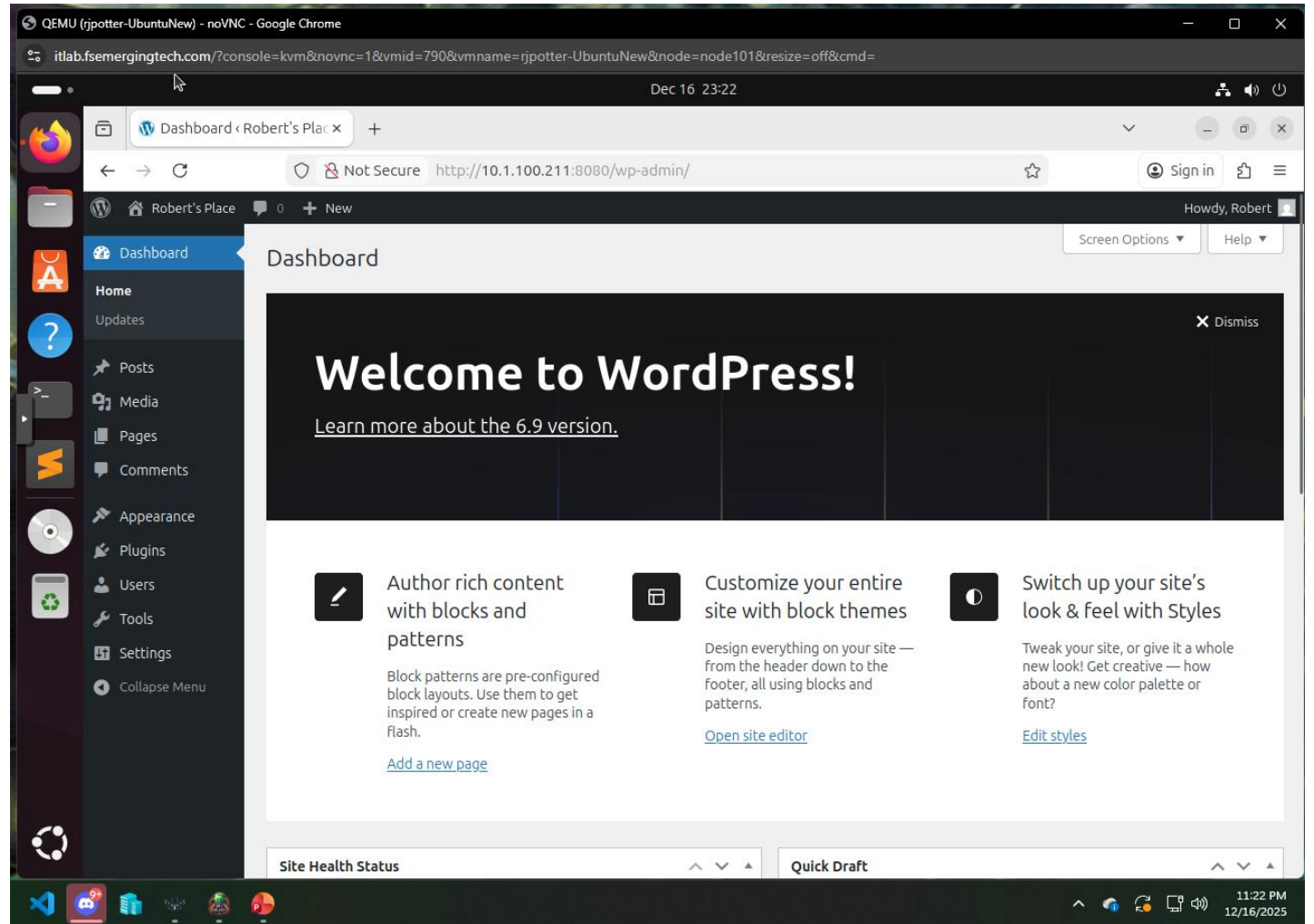
[root@Robert-Rocky wordpress]# ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens18: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether bc:24:11:b2:e9:39 brd ff:ff:ff:ff:ff:ff
    altname emp0s18
    inet 10.1.100.211/22 brd 10.1.103.255 scope global dynamic noprefixroute ens18
        valid_lft 5502sec preferred_lft 5502sec
    inet6 fe80::be24:11ff:feb2:e939/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
3: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
    link/ether 36:ca:1c:0a:b4:26 brd ff:ff:ff:ff:ff:ff
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
        valid_lft forever preferred_lft forever
4: br-5eae8d97f192: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether ce:90:26:59:76:e0 brd ff:ff:ff:ff:ff:ff
    inet 172.18.0.1/16 brd 172.18.255.255 scope global br-5eae8d97f192
        valid_lft forever preferred_lft forever
    inet6 fe80::cc90:26ff:fe59:76e0/64 scope link
        valid_lft forever preferred_lft forever
5: veth7f2492e0if2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master br-5eae8d97f192 state UP group default
    link/ether 36:e1:6c:69:a4:ac brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet6 fe80::34e1:6cff:fe69:a4ac/64 scope link
        valid_lft forever preferred_lft forever
6: veth28d19b80if2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master br-5eae8d97f192 state UP group default
    link/ether 12:63:1e:71:05:7a brd ff:ff:ff:ff:ff:ff link-netnsid 1
    inet6 fe80::1063:1eff:fe71:57a/64 scope link
        valid_lft forever preferred_lft forever

[root@Robert-Rocky wordpress]# date
Tue Dec 16 11:20:41 PM EST 2025
[root@Robert-Rocky wordpress]#
```

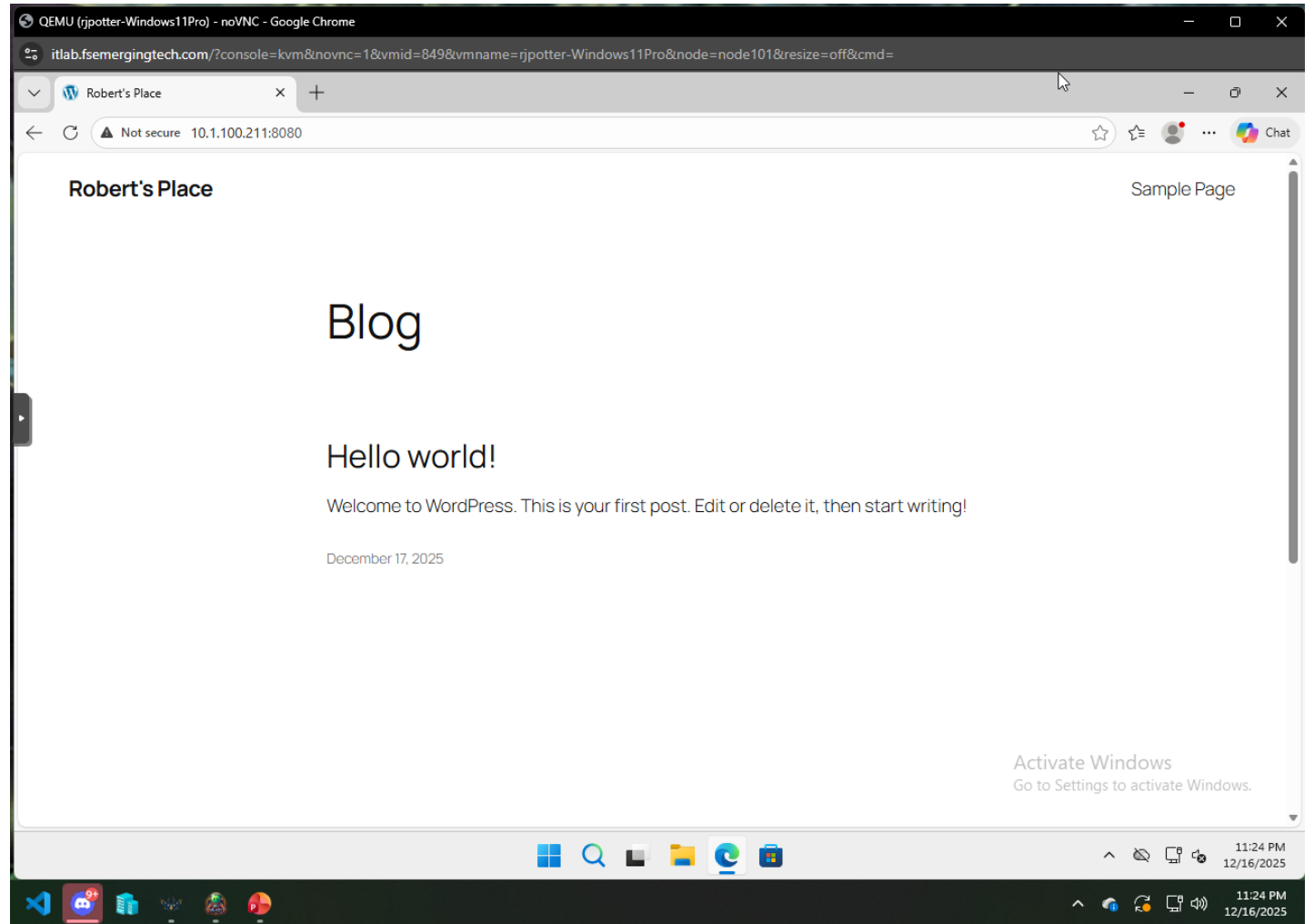
Part 4



Part 5



Part 6



Part 7

node112 - Proxmox Virtual Env

itlab.fsemergingtech.com/#v1:0:=%2Fpool%2F2512-CTI1301-rjpotter:4::::29::

Virtual Lab Virtual Environment 8.3.2

Documentation Create VM Create CT rjpotter@FS-SSO

Pool View

Resource Pool: 2512-CTI1301-rjpotter

Search:

Summary Members Permissions

Type	Description	Disk usage...	Memory us...	CPU usage	Uptime	Host CPU ...
qemu	139 (rjpotter-Server2025)				-	
qemu	140 (rjpotter-Rocky)				-	
qemu	323 (rjpotter-Ubuntu)				-	
qemu	790 (rjpotter-UbuntuNew)				-	
qemu	791 (rjpotter-WordPress)				-	
qemu	849 (rjpotter-Windows11Pro)				-	
qemu	789 (rjpotter-UbuntuTemplate)				-	

Tasks Cluster log

Start Time	End Time	Node	User name	Description	Status
Dec 16 23:25:02	Dec 16 23:25:07	node101	rjpotter@FS-SSO	VM 140 - Shutdown	OK
Dec 16 23:23:37	Dec 16 23:24:54	node101	rjpotter@FS-SSO	VM/CT 849 - Console	OK
Dec 16 23:21:14	Dec 16 23:23:30	node101	rjpotter@FS-SSO	VM/CT 790 - Console	OK

11:25 PM 12/16/2025